

AMENDMENTS TO THE CLAIMS

Please amend the claims as set forth below.

13. (CURRENTLY AMENDED) A CAD system comprising:
a memory unit having a processing information group and a process definition group,
wherein the processing information group including: includes a processed-body body data
division which stores a part whose material substance is to be removed by a series of processing
operations, as a body for each of the process operations by pre-defined work instructions given
via an input device; body information, and a process-contents division which stores information
about work contents
of each process operation in relation to the body contents of process operations, and wherein the
process definition group containing contains definitions of a plurality of series of process
operations;
a display device that displays an image; and
a controller,
in which upon selection of a series of process operations from the plurality of series of
process operations via the input device and selection of parts as CAD data a process processed
body for expressing a shape of a portion to be removed to be processed via the input device in
from an original product body via an input device, a shape information parameter of the selected
process processed body is extracted from the original product body, based on the work
instructions for each of the selected parts to be processed and tools and parameters a tool
parameter for processing is for processing the extracted shape are determined based on the
selected series of processing process operations and the extracted shape information parameter,
processed bodies as CAD data are generated separately from the parts to be processed, the

~~generated processed bodies are~~ information of the process body is stored in the processed-
body/body data division, and the determined tools and
~~parameters are~~ the tool parameter is stored in the process-contents division in relation to
information of the process body, and the process body is displayed on the display device.

14. (CURRENTLY AMENDED) A CAD system comprising:

a memory unit having a processing information group and a process definition group,
wherein the processing information group including: ~~includes a processed body/body data~~
division which stores a part whose material substance is to be removed by a series of processing
operations, as a body for each of the process operations by pre-defined work instructions given
via an input device; body information, and a process-contents division which stores information
about ~~work-contents of each process operations in relation to the body,~~ wherein the process
definition group containing ~~contains~~ definitions of a plurality of series of process operations;
a display device that displays an image; and
a controller, in which upon selection from of series of the process operations via the input
device from the plurality of series of process operations and selection of parts a process body for
expressing a shape of a portion to be removed from an original product body as CAD data to be
processed via the an input device in an original product body, a shape information parameter of
the selected process body is extracted from the original product body, based on the work
instructions for each of the selected parts to be processed and tools and parameters a tool
parameter for processing the extracted shape are ~~is~~ determined based on the selected series of
processing operations and the extracted shape information parameter, information of the process
body is stored in the body data division. the tool parameter is stored in the process-contents
division in relation to information of the process body, processed bodies/body data as CAD data
are generated separately from the parts to be processed, as shapes which do not match as after
profiling operation or other process operations, the generated processed bodies are body data is
stored in the processed-body division, and the determined tools and parameters are stored in the
process-contents division.

15. (CURRENTLY AMENDED) The CAD system according to Claim 13 or 14, wherein a variety of shapes are defined by using combinations of the tool definition groups.

16. (CANCELED)

17. (CANCELED)

18. (CANCELED)

19. (CURRENTLY AMENDED) The CAD system according to Claim 13 or 14, further comprising a ~~body~~-display control unit which, upon selection from a displayed processed bodies~~body~~, displays work contents related to the processed body.

20. (CURRENTLY AMENDED) The CAD system according to Claim 13 or 14, wherein the ~~system~~-display device displays area differences or an interference region if there is any of the area differences between the original product body and the ~~processed bodies~~process body generated in correspondence with the parts to be processed, or if the interference region exists between the ~~processed bodies~~process bodies.

21. (PREVIOUSLY PRESENTED) The CAD system according to Claim 20, wherein the area differences and the interference region are displayed in respective colors or patterns specific to the kind.

22. (PREVIOUSLY PRESENTED) The CAD system according to Claim 13 or 14, wherein each piece of work content information stored in the process-contents division is an equivalent to a work instruction in a CAM, deletion of any of the bodies causing deletion of the related work contents.

23. (PREVIOUSLY PRESENTED) The CAD system according to Claim 13 or 14, further comprising a body data control unit which, upon specifying and copying the body to another position, stores work contents for this another position in relation to the copy of the body.

24. (CURRENTLY AMENDED) The CAD system according to Claim 13 or 14, ~~wherein the process definition group includes a plurality of the processing operations, the system further comprising a body data control unit which creates and displays, on a specific area of the display unit, information of the selected series of processing operations a body corresponding to a processing operation selected from the process definition group upon specification~~ the selection of a location on a drawing the process body.

25. (CURRENTLY AMENDED) The CAD system according to Claim 13 or 14, wherein the system makes three-dimensional display.

26. (CANCELED)

27. (CANCELED).

28. (NEW) A computer program product containing instructions for creating CAD data for a CAD system comprising:

upon selection of a series of process operations from the plurality of series of process operations and selection of a process body for expressing a shape of a portion to be removed from an original product body via an input device, extracting a shape parameter of the selected process body from the original product body, ,

determining a tool parameter for processing, based on the selected series of process operations and the extracted shape parameter,

storing information of the process body in the body data division,

storing information the tool parameter in the process-contents division in relation to information of the process body, and
displaying the process body on the display device.

29. (NEW) A computer program product containing instructions for creating CAD data for a CAD system comprising:

upon selection of series of process operations from the plurality of series of process operations and selection of a process body for expressing a shape of a portion to be removed from an original product body via an input device, extracting a shape parameter of the selected process body from the original product body,

determining a tool parameter for processing, based on the selected series of process operations and the extracted shape parameter,

storing information of the process body in the body data division,

storing the tool parameter in the process-contents division in relation to information of the process body,

generating body data as CAD data separately from the parts to be processed, as shapes which do not match as after profiling operation or other process operations, and

storing the generated body data in the processed-body division.